TIRE WATCH

TIRE WATCH ™ FOR MOTORCYCLE
USER MANUAL

We thank you for buying TIRE WATCH ™ system. Tire Watch will allow you to drive more confident and to be alerted in the event of damage, slow leakage or puncture. The different possibilities of settings are hereafter explained.

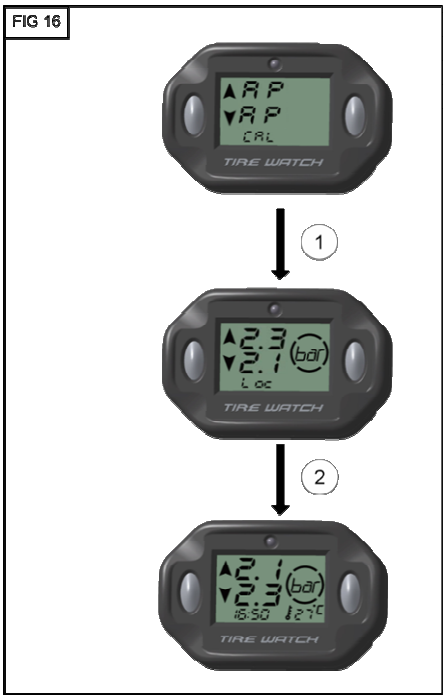
For the first use, follow the instructions here after. Once allocation is done (and only when it is done) you can set your values (C)

FIRST USE OF THE DISPLAY

FIG 16 – MENU 08 : FRONT & REAR TIRE IDENTIFIER (ID) ALLOCATION

At the first ignition, the display has to assign the ID to the front and rear tire (IDs already learned during manufacturing process).
Turn the display ON ➔ short push on (Bt1) or (Bt2)

FIG 16



When you are ready to drive, activate the calibration mode ➔ short push on (Bt1)

CAL is blinking to inform you that the calibration mode is on going

① Drive 4mn maximum up to 20km/h, CAL blinking

The received information will be displayed when the IDs are localized - Loc is blinking at its turn to enable you to invert allocation.

② To invert front and rear wheel unit sensors allocation ➔ short push on (Bt2)
To validate sensors allocation and come back to the ON mode ➔ short push on (Bt1)

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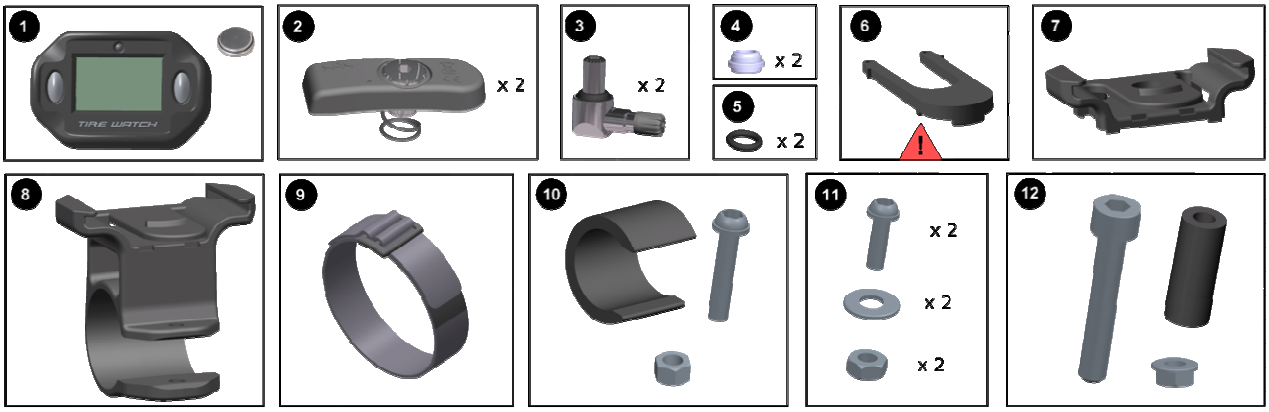
TIRE WATCH

A – KIT COMPOSITION (Ø 8,5 - Ø 11,5)



❶ 1 display + button battery CR2450
❷ 2 wheel unit sensors (each sensor has a unique identifying code : ID)
❸ 2 valves
❹ *2 specific seals sold in 11,5 kit*
❺ *2 seals for 8,5mm valve hole sold in 8,5 kit*
❻ 1 connector position assurance (CPA)
❼ 1 clipbody
❽ 1 clipbar
❾ 1 bracelet
❿ 1 handle bar screws kit : 1 M5x20 screw, 1M5 self locking nut, 1 sleeve
⓫ 1 motor body screw kit : 2 M3 screws, 2 M3 nuts, 2 washers
⓬ 1 steering column screw kit : 1 compressible brace, 1 M5x40 screw, 1 M5 nut with washer

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B- KNOW EVERYTHING ABOUT YOUR EQUIPMENT

FIG 1 – DISPLAY BUTTON FUNCTION PRESENTATION

Bt1 : ON / Unrolling menus and validation / Backlight only
Bt2 : ON / OFF / Digits setting / swap from pressure display (Bar/PSI) to temperature (°C) + backlight (4s)

① – Pressure or temperature information
② – Pressure (bar/PSI) or Temperature unit (°C)
③ – External temperature - *NB : Due to waterproofness of the housing, the stabilization of the values can take few minutes.*
④ – Clock in mode 24 hours
Note : Permanent back light possibility : to activate permanent back light press simultaneously Bt1 and Bt2. To switch off the permanent back light, idem. This back light mode use more battery so it usage is desirable only for the night.

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FIG 2 – HOUR AND TEMPERATURE DISPLAY (4s) FROM OFF MODE ➔ Long push on (Bt2)

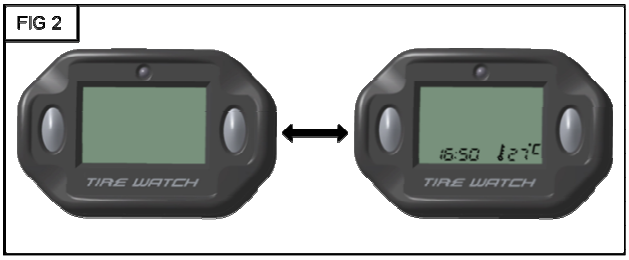
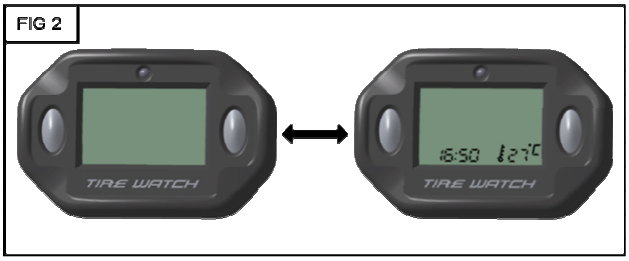


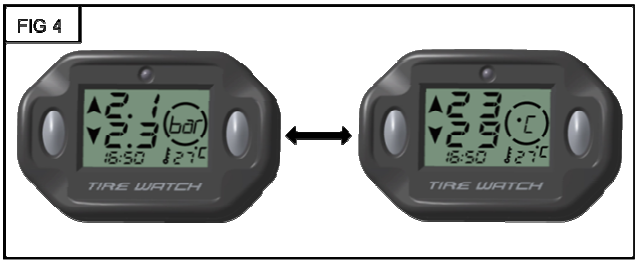
FIG 3 – TURN THE DISPLAY ON & OFF



ON ➔ short push on (Bt1) or (Bt2) (temperature displayed after 10s)
The display is waiting for IDs reception.

OFF ➔ long push on (Bt2) or automatically turn off after 6mn caused by engine stop or no wheel unit sensor reception.
NB : Always turn the display on before driving.

FIG 4 – CHANGING THE DISPLAYED MODE



Pressure is the standard display mode – To display Temperature ➔ short push on (Bt2)
To return to pressure display ➔ push again shortly on (Bt2)

C – SET YOUR VALUES

Accede to the unrolling menu > long push on (Bt1)
Once the wanted menu is reached ➔ (the first digit is blinking to inform you that you enter the menu), to set the 1st digit ➔ short push on (Bt2) until the wanted value is reached.
To validate the 1st digit and set the 2nd digit ➔ short push on (Bt1)
Repeat the operation until the last digit.
To validate the last digit and the on going menu ➔ short push on (Bt1)
To accede on the following menu ➔ short push on (Bt1)
To go back to the ON mode : (FIG 3) ➔ long push on (Bt1)

D - SET YOUR VALUES BY USING THE UNROLLING MENU

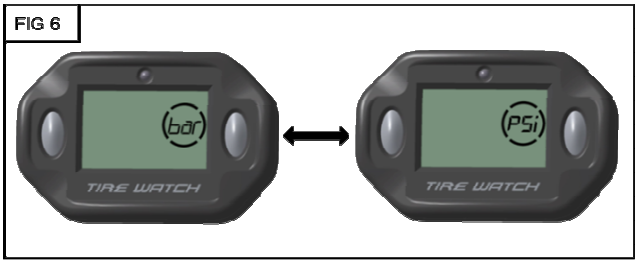
FIG 5 – MENU 01 : HOUR SETTING

FIG 5

Adjust your values as described in chapter C

FIG 6 – MENU 02 : Pressure and Temperature Unit Choice

FIG 6



Standard unit is Bar, to swap in PSI ➔ Short push on (Bt1) , to swap again to bar unit, press again on (Bt1) . To validate your unit choice, press on (Bt1) . Temperature unit is fixed to °C, push shortly on (Bt1) to access the next menu.

FIG 7 – MENU 03 : FRONT TIRE PRESSURE THRESHOLD SETTING

FIG 7

Setting range for front and rear values : 1,4 bar to 3,5 bar (20 to 51 PSI)
Maximum alert pressure : Pmax (HI) pre-programmed at 3,5 bar (51 PSI)
Minimum alert pressure: Pmin (LO) pre-programmed at 1,8 bar (26 PSI)
Set the Pmax (HI) and Pmin (LO) values for front tire.

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FIG 8 – MENU 05 : REAR TIRE PRESSURE THRESHOLD SETTING

Maximum alert pressure : Pmax (HI) ➔ pre-programmed at 3,5 bar (51 PSI)
Minimum alert pressure : Pmin (LO) ➔ pre-programmed at 1,8 bar (26 PSI)
Set the Pmax (HI) and Pmin (LO) digits for rear tire.

FIG 9 – MENU 04 : FRONT TIRE TEMPERATURE THRESHOLDS SETTING

Setting range for front and rear values : -19°C to +99°C
Maximum alert temperature : Tmax (HI) preprogrammed at 60°C
Minimum alert temperature : Tmin (LO) preprogrammed at 3°C
Set Tmax (HI) & Tmin (LO) digits for front tire.

FIG 10 – MENU 06 : REAR TIRE TEMPERATURE THRESHOLDS SETTING

Tmax (HI) preprogrammed at 60°C / Tmin (LO) preprogrammed at 3°C
Set Tmax (HI) & Tmin (LO) digits for rear tire.

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E – ALLOCATE YOUR WHEEL UNIT SENSORS

Process to follow when you change one or two wheel unit sensors

FIG 11 FROM 15 – MENU 07 : MANUAL LEARNING

⚠ During all the learning process, tires must at least be inflated at 1 bar.

From ON ➔ extended push on (Bt1) until Menu 07 is reached : wheel unit sensors **identifiers (IDs)** learning mode activated.

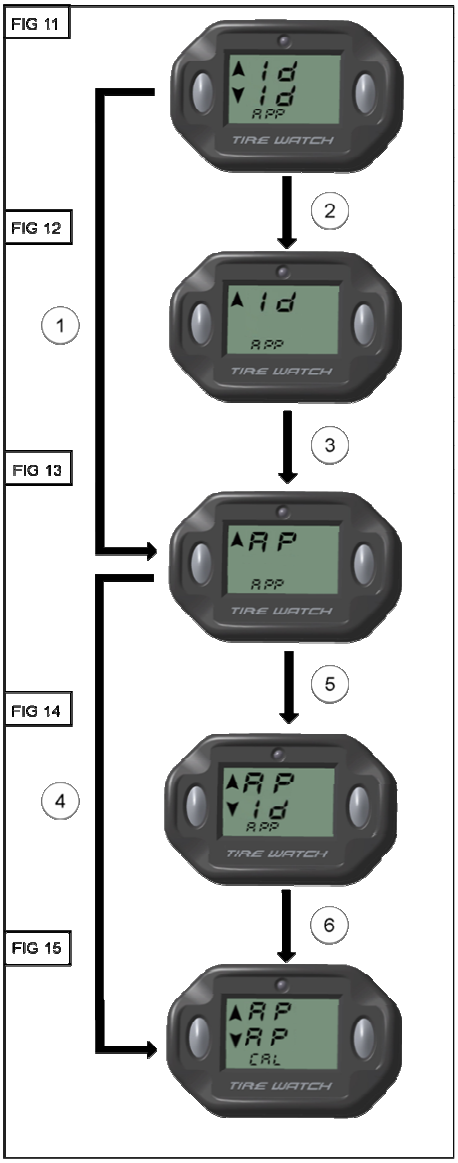

FIG 11 – 12 – 13 : Front tire ID learning

① **To keep in memory the old ID** and access to rear tire identification learning ➔ short push on (Bt1)

② **To change the front tire ID** ➔ The tire must be mounted on a balancing machine to start the RF emission and the display must be placed at 50cm from the tire.

③ Push shortly on (Bt2) and wait (max 10 s) for a RF frame reception with the new ID ; AP is displayed when the ID is learned.

FIG 13 – 14 – 15 :Rear tire ID learning

④ **To keep in memory the old ID** ➔ short push on (Bt1)

⑤ **To change the rear tire ID** ➔ The tire must be mounted on a balancing machine to start the RF emission and the display must be placed at 50cm from the tire.

⑥ Push shortly on (Bt2) and wait (max 10 s) for a RF frame reception with the new ID ; AP is displayed when the ID is learned.

Process now as explained in chapter FIRST USE OF THE DISPLAY(MENU 08 - FIG 16)

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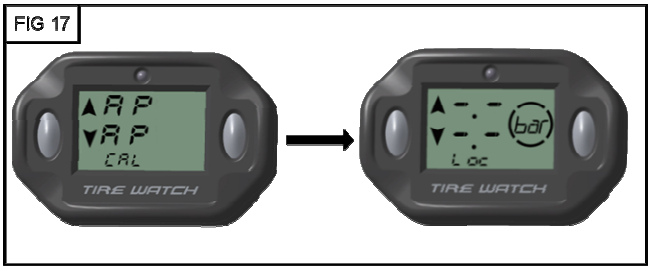
FIG 17 – INFORMATION NOT RECEIVED



⚠ Wait 10 minutes motorcycle stopped and start again the IDs allocation (MENU 08)

F – RECOGNIZE THE DIFFERENT ALERT MODES

FIG 18 – PRESSURE THRESHOLD CROSSING ALERT

When the display receives lower or upper pressure information compared to the programmed thresholds (Pmin & Pmax), the alert starts:
- led / backlight alternative flashing 2 times a second and
- value / exclamation mark alternative flashing 1 time a second

FIG 19 - TEMPERATURE THRESHOLD CROSSING ALERT

When the display receives lower or upper temperature information compared to the programmed thresholds (Tmin & Tmax), the alert starts:
- backlight flashing 2 times a second and
- value / exclamation mark alternative flashing 1 time a second

When starting:
Alert is shown only when both wheel pressures are received; Pressures are displayed during 15 s before showing Temperature alert.
During a Temperature alert:
The alert mode follows this displaying cycle: Pressure during 4 seconds, after temperature during 8 seconds. During the alert, a short push on allows you to fix during 8 seconds the temperature values, after normal alert cycle start again.
NB : Pressure alert has priority even if temperature alert is active.

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FIG 20 – LOW BATTERY DISPLAY ALERT

FIG 20

Battery symbol is blinking to inform you that you have to change the display battery (button battery CR2430 or CR2450).

FIG 21 - NON PERMANENT LOSS OF COMMUNICATION

FIG 21

FIG 22 – WHEEL UNIT SENSOR LOW BATTERY ALERT

FIG 22

The pressure information blinks alternately with Lo symbol to inform you that the sensor must be replaced. Ask your distributor. In winter conditions do not care about this message below 8°C.

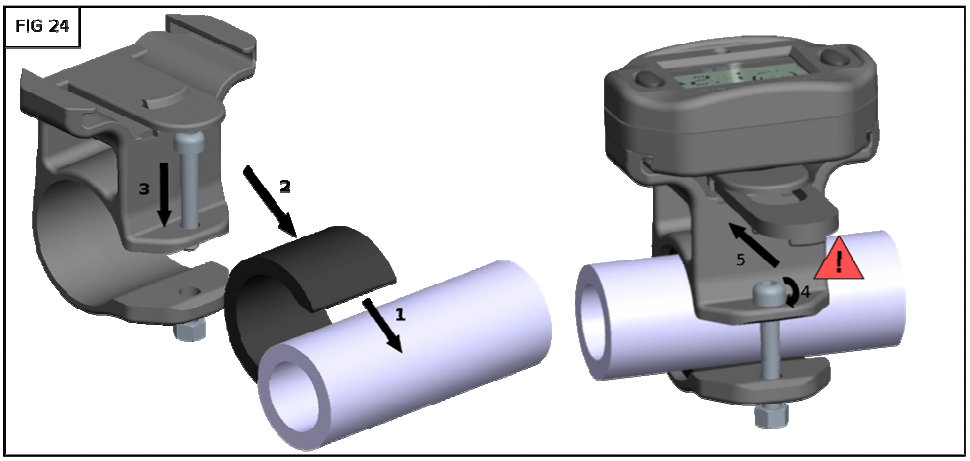
FIG 23 – EXTERNAL TEMPERATURE ALERT – RISK OF ICE

FIG 23

When the display sensor measures a temperature lower or equal to 3°C, it starts the alert to inform you about a risk of ice : **temperature symbol is blinking**

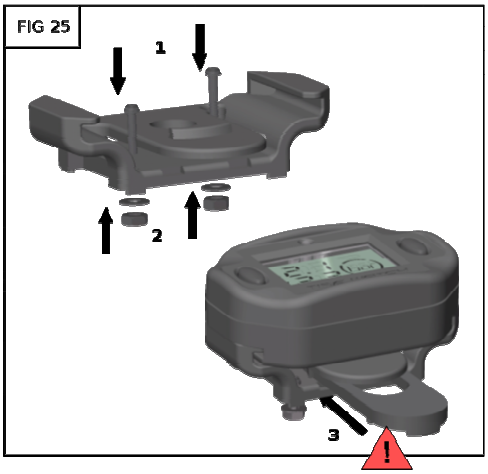
G – HOW TO FIX YOUR DISPLAY

FIG 24 – HANDLE BAR FIXING



Put the display to the selected place on the handle bar and fix it with the screw kit n°❿. Then clip the display and place the CPA n°❻. The tab that allows you to remove the display is now blocked.

FIG 25 – BODY MOTOR FIXING



First, drill the body and fix the base clipbody base with the screw kit n°11. Then clip the display and place the CPA n°❻. The tab that allows you to remove the display is now blocked.

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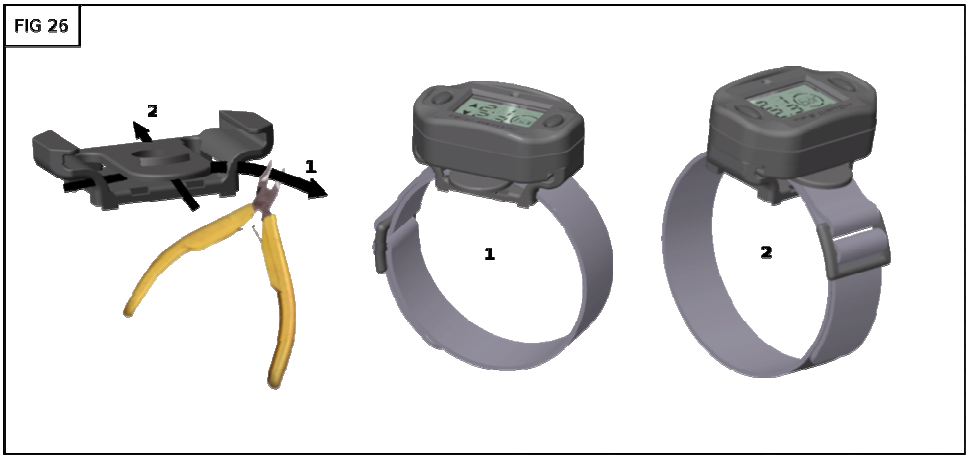
FIG 26 – BRACELET FIXING

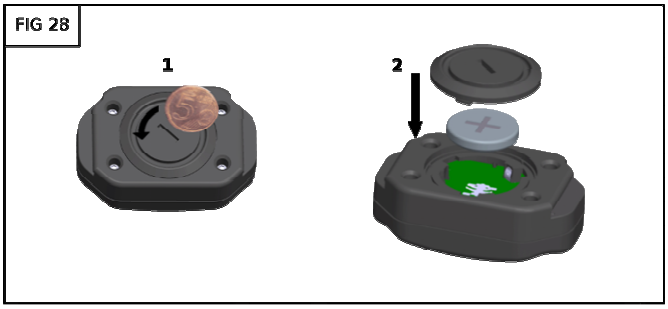


Make the bracelet run through the planned slots of the clipboby (horizontally or vertically) by introducing it from an angle. Then, pull it strongly by using pliers. Clip the display. Do not put the CPA with bracelet.

FIG 27 – STEERING COLUMN FIXING (from ∅12 to ∅16mm)

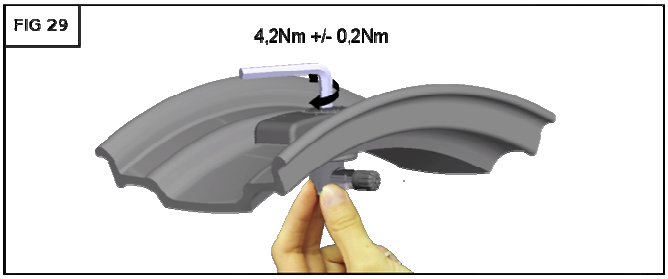
Insert the screw into the clipbody central hole (screw kit n°12). Then place the compressible brace and the nut on the screw and put it on the steering column tube. Screw until the clipbody is correctly fixed (NB : do not exceed 2Nm). Put in place the CPA n°❻

FIG 28 – CHANGE THE BATTERY FROM THE DISPLAY



Unscrew the battery cover situated on the back of the display using a five euros cents coin. Replace the used battery with a new one (CR2430 or CR2450) as illustrated and screw again the battery cover.

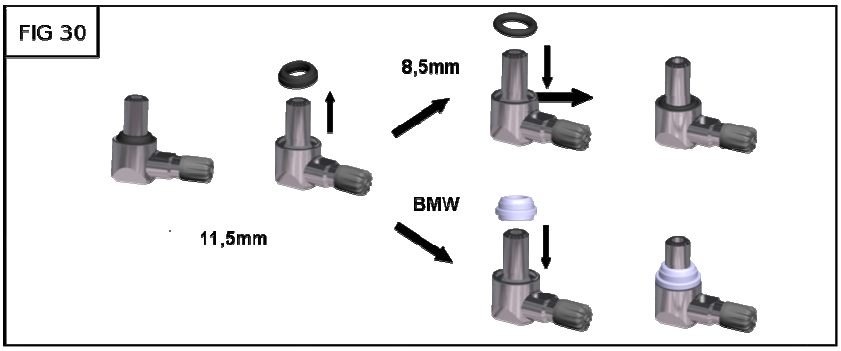
FIG 29 – REMINDER FOR MOTOR DEALERSHIP FOR WHEEL UNIT SENSORS MOUNTING



Screw the nut with a 5mm allen key. Do not exceed 2 rounds per second and hold the valve while screwing to prevent it from turning around.

Final torque 4,2Nm +/- 0,2Nm – The sensor must not get in touch with the tire during the mounting process.

FIG 30 – SPECIFICITY



<u>On some BMW rims</u> : A deep external concavity makes the use of the thick seal (grey color) mandatory. Put it as illustrated. Remove the 11.5 seal and introduce the new one.

<u>On rim with 8,5mm valve hole</u> : Use the indicated seal to put as illustrated. Remove the 11.5 seal and introduce the new one. For special rim like DYMAG, OZ racing, keep the 11.5 seal

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H – SAFETY AND GENERAL INFORMATION

Users are not permitted to proceed any changes or modify the device in any way.
TIRE WATCH ™ has an information goal that does not replace the inflation phases under the initiative and entire responsibility of the pilot. Tire pressure has to be done according to manufacturer recommendations; always inflate your tire cold (23°C). If the inflation process takes less than 6 min (after driving), the information will be updated every 5 seconds. Should the opposite occur, the information will be updated while driving.

USA, Canada and European Union Directives Conformity

Products marked CE are in compliance with Directive R&TTE (99/5/EC).
Products marked FCC are in compliance with Directive FCC- part 15.

Using precautions

- Never fix directly on a metal part, you may loose signal.
- Do not wash directly with a jet of water (ex : karcher). TIRE WATCH is only rain proof
- Avoid prolonged sun exposition when you don't use it.
- Do not repair the device by your own, you may loose warranty. The internal components reparation must be done by qualified technician or recognized repairing centre.
- Never use solvent, only wash TIRE WATCH with water soap and sweet cloth.
- If you drive close to electromagnetic disturbance (military base, embassy,…) you may loose temporary the signal.

Warranty : one year by presenting your bill and the warranty card filled out and stamped by your motor dealership.

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